

PATENT CLAIMS

1. Method for the production of cast steel strip (B), wherein, in a continuous procedure, a steel melt is cast into a casting gap (4), the longitudinal sides of which are formed by walls that move during the casting process, to form the steel strip (B), and the steel melt, which is present above the casting gap (4) in a melt pool (6), is held under an atmosphere (A) containing nitrogen and hydrogen, characterised in that the hydrogen content of the atmosphere (A) is greater than 0 mol % to 10 mol %, and the Cr, Mo, Nb, Si, Ti, Ni, Mn, C or N contents of the cast steel melt, which are selectively present in each case for adjusting the characteristics of the steel strip (B), are in each case selected in such a way that for the ratio Cr_{eq}/Ni_{eq} formed from the Cr equivalent Cr_{eq} and the Ni equivalent Ni_{eq} , the following applies:

$$Cr_{eq}/Ni_{eq} \geq 1.7,$$

wherein $Cr_{eq} = \%Cr + 1.37 \%Mo + 2 \%Nb + 1.5 \%Si + 3 \%Ti$,
 $Ni_{eq} = \%Ni + 0.31 \%Mn + 22 \%C + 14 \%N + \%Cu$,
 $\%Cr$ = respective Cr content,
 $\%Mo$ = respective Mo content,
 $\%Nb$ = respective Nb content,
 $\%Si$ = respective Si content,
 $\%Ti$ = respective Ti content,
 $\%Ni$ = respective Ni content,
 $\%Mn$ = respective Mn content,
 $\%C$ = respective C content,
 $\%N$ = respective N content.

2. Method according to Claim 1, characterised in that the casting gap (4) is formed between two casting rollers (2, 3), which rotate in opposite directions, are cooled during the casting operation and delimit the longitudinal sides of the casting gap (4).
3. Method according to either one of the preceding claims, characterised in that the hydrogen content of the atmosphere (A) is at least 0.5 mol %.
4. Method according to any one of the preceding claims, characterised in that the hydrogen content of the atmosphere (A) is no greater than 7.5 mol %.
5. Method according to any one of the preceding claims, characterised in that the atmosphere (A) additionally contains a noble gas.
6. Method according to Claim 5, characterised in that the noble gas is argon.
7. Method according to any one of the preceding claims, characterised in that the nitrogen content of the atmosphere (A) is at least 30 mol %.
8. Method according to any one of the preceding claims, characterised in that for the ratio Cr_{eq}/Ni_{eq} , the following applies: $Cr_{eq}/Ni_{eq} \geq 1.8$.
9. Method according to any one of Claims 2 to 8, characterised in that the casting rollers (2, 3) have a stochastic unevenness distribution.